

## Clinical, hematological and angiographic characteristics of the patients according to pre-procedural platelet to lymphocyte ratio tertiles

Variable	Tertile 1 88.2 (84.6-91.8) n=96	Tertile 2 135.2 (132.0-138.4) n=96	Tertile 3 231.7 (220.5-242.8)	p value
Age, years	57.6 ± 13.3	60.2 ± 13.7	64.5 ± 13.2	0.002
Male sex, n (%)	78 (81.3)	70 (72.9)	65 (68.4)	0.120
Hypertension, n (%)	29 (30.2)	29 (30.2)	40 (42.1)	0.135
Diabetes mellitus, n (%)	13 (13.5)	25 (26)	24 (25.3)	0.062
Smoking, n (%)	51 (53.1)	55 (57.3)	35 (36.8)	0.012
Glucose, mg/dl	151 ± 72	151 ± 63	170 ± 80	0.051
Creatinine, mg/dl	0.88 ± 0.20	0.83 ± 0.20	0.89 ± 0.27	0.109
C-reactive protein*, mg/dl	0.65 ± 0.38	0.67 ± 0.43	0.78 ± 0.54	0.573
Total cholesterol, mg/dl	175 ± 42	175 ± 36	168 ± 40	0.339
High-density lipoprotein, mg/dl	37 ± 9	34 ± 8	35 ± 11	0.828
Low-density lipoprotein, mg/dl	106 ± 32	110 ± 32	108 ± 30	0.648
Triglyceride, mg/dl	152 ± 111	150 ± 89	133 ± 78	0.388
Hemoglobin, g/dl	14.1 ± 1.4	14.1 ± 1.4	13.8 ± 1.5	0.305
Red-cell distribution width, %	15.9 ± 1.3	15.9 ± 1.3	16.1 ± 1.2	0.084
Platelet count, x 10 <sup>9</sup> /L	233 ± 59	254 ± 46	294 ± 68	<0.001
Mean platelet volume, fl	8.2 ± 1.2	8.1 ± 1.1	8.0 ± 1.1	0.221
White blood cell count, x 10 <sup>9</sup> /L	12.42 ± 3.11	12.17 ± 2.82	12.15 ± 2.97	0.788
Neutrophil count, x 10 <sup>9</sup> /L	8.67 ± 2.78	9.42 ± 2.82	10.04 ± 2.97	0.004
Lymphocyte count, x 10 <sup>9</sup> /L	2.75 ± 0.96	1.90 ± 0.38	1.34 ± 0.46	<0.001
Neutrophil to lymphocyte ratio	3.44 ± 1.47	5.24 ± 2.20	8.44 ± 3.83	<0.001
Pre-procedural TIMI flow grade 0, n (%)	58 (60.4)	51 (53.1)	60 (63.2)	0.486
Post-procedural TIMI flow grade 3, n (%)	90 (93.8)	86 (89.6)	52 (54.7)	<0.001
Post-procedural TIMI flow grade ≤2, n (%)	6 (6.3)	10 (10.4)	43 (45.3)	<0.001
Drug eluting stents, n (%)	39 (40.6)	42 (43.8)	46 (48.4)	0.551
Stent diameter, mm	3.02 ± 0.39	3.01 ± 0.42	2.96 ± 0.36	0.462
Stent length, mm	22.5 ± 5.4	22.5 ± 6.7	24.0 ± 7.3	0.361
Pre-dilatation, n (%)	79 (82.3)	78 (81.3)	80 (84.2)	0.861
Post-dilatation, n (%)	53 (55.2)	55 (57.3)	51 (53.7)	0.881
Non-anterior myocardial infarction, n (%)	49 (51)	49 (51)	51 (53.7)	0.668

\*C-reactive protein levels were available for 175 patients.

## PP-366

### Transcatheter Closure of PDAs at the Seriously Ill premature Babies

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**Aim:** The aim of this stud was to evaluate our institutional experience of transcatheter closure of PDA at the seriously ill premature babies. Currently available technology is not designed for these age groups. Transcatheter occlusion of PDA at the preterm babies challenges the interventionist.

**Methods:** Eleven seriously ill premature infants underwent PDA closure with different devices, if they still had clinically important PDA, despite appropriate medical treatment. Only venous approach was used in nine patients. The Amplatzer duct occluder (ADO) type II, Cook detachable coil and ADO type II additional sizes were used. Co-morbid problems listed like this: respiratory distress syndrome in 9 patients, necrotizing enterocolitis in 7, intracranial hemorrhage in 7, bronchopulmonary dysplasia in 5, extreme premature in 4, intravascular coagulopathy in 3, and renal failure in 2, and pulmonary hemorrhage in 2 patients. All the patients had entubated.

**Results:** Gestational age of patients was ranged between 26-31 weeks. Mean birth weight was 1120 ± 260 (900-1610) gr, procedural weight was 1870 ± 510 (1190-2820) gr. Mean age of the patient was 36 (14 – 90) day. Mean PDA dimension at the angiography was 2.55 (1–3.5) mm. 4F sheath was used at the all procedures. All implantations were technically successful. Echocardiography confirmed no residual shunts on the following day. During manipulation, cardiac perforation occurred in one patient and the patient was lost. Another patient died six days after procedure because of co-morbid problems. PDAs were completely occluded without significant obstruction of the pulmonary arteries or aorta. Additional sizes were used in 9 times; the others were used once.

**Conclusions:** At these special age groups, delicate catheter and guidewire manipulation is needed. Especially, the lower profile and symmetry of ADO additional sizes give the opportunity to close PDAs in premature babies Transcatheter technique is possible at the seriously ill preterm infants. And it is a safe alternative to surgical ligation especially for the critically ill patients.

## PP-367

### Increased Neutrophile to Lymphocyte Ratio is Related with Poor Coronary Collateral Development in Patients with Stable Coronary Artery Disease

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**Objectives:** The strong relationship between increased neutrophile to lymphocyte ratio (NLR) and cardiovascular disease has been shown in many studies. In this study, we investigated whether serum NLR levels affect coronary collateral circulation in patients with stable coronary artery disease

**Methods:** The study population consisted of 101 patients who underwent coronary angiography with a suspicion of coronary artery disease. Blood samples were taken and NLR levels were analyzed for all patients. Rentrop collateral classification was performed. Patients were divided into two groups on the basis of Rentrop scores: group I consisted of 40 patients (31 male, 16 female) with grade 0-1 collateral development regarded as poor collateral group and group II consisted of 61 patients (29 male, 14 female) with grade 2-3 collateral development regarded as good collateral group.

**Results:** Table 1 indicated that there were no statistically significant differences between the study groups with regard to demographic characteristics and baseline laboratory findings. Table 2 concluded that Group I had significantly higher NLR levels compared with Group 2 (6.5±1.9 vs. 5.2±1.4 mg/dl, p=0.001). Figure 1 showed that NLR levels were higher in patients with absence of coronary collateral compared with patients with presence of coronary collateral (4.0±1.7 vs. 2.6±1.5, p=0.001).

**Conclusion:** Serum NLR level on admission is associated with poor CCC development and may be a useful biomarker for stratification of risk in patients with stable coronary artery disease.

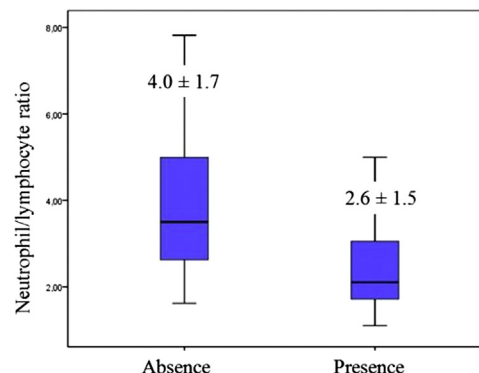


Table 1. indicated that there were no statistically significant differences between the study groups with regard to demographic characteristics and baseline laboratory findings.

	Group I (n=40)	Group II (n=61)	P value
Male (n,%)	21(52)	41(67)	0.10
Age (years)	63±9	63±10	0.95
BMI (kg/m <sup>2</sup> )	27±3.0	27±3.5	0.85
Smoking (n, %)	10(25)	21(34)	0.21
DM (n,%)	18(45)	21(34)	0.19
HT (n,%)	24(60)	29(48)	0.15
Hemoglobin(mg/dl)	13.8±1.5	13.9±1.6	0.87
Creatinine (mg/dl)	0.98±0.24	1.1±0.31	0.10
Total cholesterol (mg/dl)	198 ±40	195 ±37	0.88
LDL cholesterol (mg/dl)	120±30	125±35	0.48
HDL cholesterol (mg/dl)	41±8	40±9	0.75
Triglyceride (mg/dl)	187±71	164±87	0.28
Hs-CRP(mg/L)	7.8±2.2	3.6±1.4	0.001

Table 2. White blood cell, neutrophil, lymphocyte, and monocyte counts of groups.

	Group I (n=40)	Group II (n=61)	P values
Neutrophils,(x1000/μl)	6.5± 1.9	5.2± 1.4	0.001
Lymphocytes,(x1000/μl)	1.7± 0.6	2.5±0.6	0.001
Neutrophil/lymphocyte ratio	4.1± 1.7	2.1± 0.9	0.001